i-series
Standard Range

i230/SA2M
(Vibration generator)

i230/SA2M
(With a slip table)

Enhanced system performance extends test capabilities

Vibration tests have diversified and specifications have become increasingly strict.
i-series offer a user-friendly lineup with enhanced performance and durability.

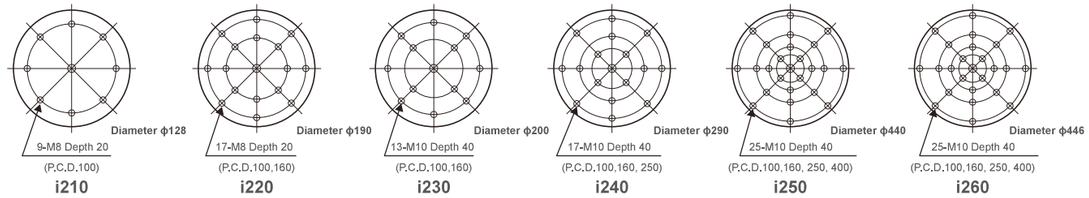
[Expanded test range: maximum values that i-series can offer] •Maximum acceleration : 1250 m/s² •Maximum velocity : 3.5 m/s •Maximum displacement : 51 mmp-p •Maximum loading mass: 1,000 kg

[Patented upper (armature) support system PS Guide] Parallel Slope Guide is standard

[Low noise] Optimised design of the air intake based on fluid dynamics has reduced the air-intake noise.

[All models can be directly coupled to a climatic chamber.]

Table Insert Pattern (Unit:mm)



Specifications

System Model			i210/SA1M	i220/SA1M	i230/SA2M	i240/SA3M	i250/SA4M	i250/SA5M	i260/SA7M
System Specifications	Frequency Range (Hz)		0–4000	0–3300	0–3000	0–2600	0–2500	0–2500	0–2600*3
	Rated Force	Sine (kN)	3	8	16	24	32	40	54
		Random (kN rms)*1	3	8	16	24	32	40	54
		Shock (kN)	9	16	32	48	64	80	108
	Maximum Acc.	Sine (m/s²)	1000	1250	1250	1200	914	1142	1000
		Random (m/s² rms)	700	875	875	840	640	800	700
		Shock (m/s² peak)	2000	2500	2500	2400	1828	2284	2000
	Maximum Vel.	Sine (m/s)	2.2	2.2	2.2	2.2	2.2	2.2	2.2
		Shock (m/s peak)	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	Maximum Disp.	Sine (mmp-p)	30	51	51	51	51	51	51
		Maximum Travel (mmp-p)	40	60	64	68	68	68	64
	Maximum Load (kg)		120	200	300	400	600	600	1000
	Power Requirements (kVA)*2		6.8	16.4	26	36	51	57	83
Vibration Generator	Model		i210	i220	i230	i240	i250	i250	i260
	Armature Mass (kg)		3	6.4	12.8	20	35	35	54
	Armature Diameter (φmm)		128	190	200	290	440	440	446
	Allowable Eccentric Moment (N·m)		160	294	700	850	1550	1550	1550
	Dimensions (mm) W×H×D		868×700×458	1020×903×550	1124×957×860	1234×997×890	1463×1187×1100	1463×1187×1100	1527×1198×1100
	Shaker Body Diameter (φmm)		458	550	630	720	860	860	920
	Mass (kg)		350	900	1500	2000	3000	3000	3500
Power Amplifier	Model		SA1M-i10	SA1M-i20	SA2M-i30	SA3M-i40	SA4M-i50	SA5M-i50	SA7M-i60
	Maximum Output (kVA)		5	10	20	30	40	50	64
	Dimensions (mm) W×H×D		580×1950×850	580×1950×850	580×1950×850	580×1950×850	580×1950×850	580×1950×850	1160×1950×850
	Mass (kg)		240	280	300	410	850	880	1400
Controller	Vibration Controller		See Vibration Controller K2						
Cooling	Cooling Method		Air cooling						
	Blower	Dimensions (mm) W×H×D	600×1905×557	808×2085×733	1044×2285×704	929×2175×534	1160×2405×787	1160×2405×787	1160×2405×787
		Mass (kg)	45	85	150	150	250	250	250

Eco Specifications

System Model			EM2201	EM2301	EM2401	EM2501	EM2502	EM2601
System Specifications	Frequency Range (Hz)		0–3300	0–3000	0–2600	0–2500	0–2500	0–2600*3
	Rated Force	Sine (kN)	8	16	24	32	40	54
		Random (kN rms)*1	8	16	24	32	40	54
		Shock (kN)	16 (10)*4	32 (23)*4	48 (36)*4	64 (49)*4	80 (63)*4	108 (90)*4
	Maximum Acc.	Sine (m/s²)	1250	1250	1200	914	1142	1000
		Random (m/s² rms)	875	875	840	640	800	700
		Shock (m/s² peak)	2500	2500	2400	1828	2284	2000
	Maximum Vel.	Sine (m/s)	2.2	2.2	2.2	2.2	2.2	2.2
		Shock (m/s peak)	2.2 (3.5)*4	2.2 (3.5)*4	2.2 (3.5)*4	2.2 (3.5)*4	2.2 (3.5)*4	2.2 (3.5)*4
	Maximum Disp.	Sine (mmp-p)	51	51	51	51	51	51
		Maximum Travel (mmp-p)	60	64	68	68	68	64
	Maximum Load (kg)		200	300	400	600	600	1000
	Power Requirements (kVA)*2		16.4	26	36	51	57	83
Vibration Generator	Model		i220	i230	i240	i250	i250	i260
	Armature Mass (kg)		6.4	12.8	20	35	35	54
	Armature Diameter (φmm)		190	200	290	440	440	446
	Allowable Eccentric Moment (N·m)		294	700	850	1550	1550	1550
	Dimensions (mm) W×H×D		1020×903×550	1124×957×860	1234×997×890	1463×1187×1100	1463×1187×1100	1527×1198×1100
	Shaker Body Diameter (φmm)		550	630	720	860	860	920
	Mass (kg)		900	1500	2000	3000	3000	3500
Power Amplifier	Model		SA1M-i20EM	SA2M-i30EM	SA3M-i40EM	SA4M-i50EM	SA5M-i50EM	SA7M-i60EM
	Maximum Output (kVA)		10	20	29	40	50	64
	Dimensions (mm) W×H×D		580×1950×850	580×1950×850	580×1950×850	1160×1950×850	1160×1950×850	1160×1950×850
	Mass (kg)		280	350	460	900	930	1400
Controller	Vibration Controller		See Vibration Controller K2					
Cooling	Cooling Method		Air cooling					
	Blower	Dimensions (mm) W×H×D	808×2085×733	1044×2285×704	929×2175×534	1160×2405×787	1160×2405×787	1160×2405×787
		Mass (kg)	85	150	150	250	250	250

*1) Random force ratings are specified in accordance with ISO5344 conditions. Please contact IMV or your local distributor with specific test requirements.
*2) Power supply : 3-phase 200/220/240/380/400/415/440 V, 50/60 Hz. A transformer is required for other supply voltages.
*3) Above 2000 Hz, the force rolls-off at a rate of -12 dB/oct.
*4) Maximum velocity 4.6 m/s. High velocity restricts maximum Shock force. Please contact IMV or your local distributor with specific test requirements.
* The specification shows the maximum system performance. For long-duration tests, de-rating by up to 70 % must be applied. Continuous use at maximum levels may cause failure.
* In the case of Random vibration test, please set the test definition of the peak value of acceleration waveform to be operated less than the maximum acceleration of Shock.
* Frequency range values vary according to sensor and vibration controller.

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